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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,304	08/09/2002	Thomas T. Allgeuer	ADVA:005	9486

7590

12/03/2003

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EXAMINER

NORDMEYER, PATRICIA L

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 12/03/2003

14

Please find below and/or attached an Office communication concerning this application or proceeding.

clo 14

Office Action Summary	Application N .	Applicant(s)	
	10/031,304	ALLGEUER ET AL.	
	Examin r	Art Unit	
	Patricia L. Nordmeyer	1772	

-- The MAILING DATE of this communication app ars on the cov r sheet with th correspondenc addr ss --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-31 and 35-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 32-34 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|---------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>12</u> . | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of claims 1 – 31 and 35 – 47 in Paper No. 13 is acknowledged. The traversal is on the ground(s) that claims 32 is dependent on claim 1, thereby making a single general inventive concept. This is not found persuasive because even though the claims are dependent on independent claims, the special technical feature still does not provide a contribution over the prior.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1, 20, 22, 27, 35 – 45 and 47 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase “which are at least partially hollow with at least about 25 percent of the volume at the top of the peaks being empty” in claims 1, 20 and 22 is unclear, which render the claims vague and indefinite. It is unclear from the claim language and figures if each individual peak of the fringe is hollow or if the area opened between two peaks forms the hollow portion referred to in the claim.

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The phrase "Hollowness Index, which is calculated by multiplying the hollow depth ratio" in claim 5 is unclear, which renders the claim vague and indefinite. It is unclear from the claim language what is referring to by the "hollow depth ratio". Is this ratio referring to what length of the fringes is hollow?

The phrase "sheet or coating according to claim 13, wherein at least one of the layers is a foamed layer" in claim 14 is unclear, which renders the claim vague and indefinite. Claim 14 appears to be dependent on the wrong claim. In order to have antecedent basis for the claim, it should be dependent on claim 10.

4. Regarding claims 1, 20, 22, 27 and 35 the phrases "crater-like" and 'textile-like' render the claims indefinite because the claims includes elements not actually disclosed (those encompassed by " like"), thereby rendering the scope of the claims unascertainable. See MPEP § 2173.05(d).

5. Claims 35 – 45 and 47 provide for the use of the profile or molding, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 35 – 45 and 47 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of

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a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Correction/clarification is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

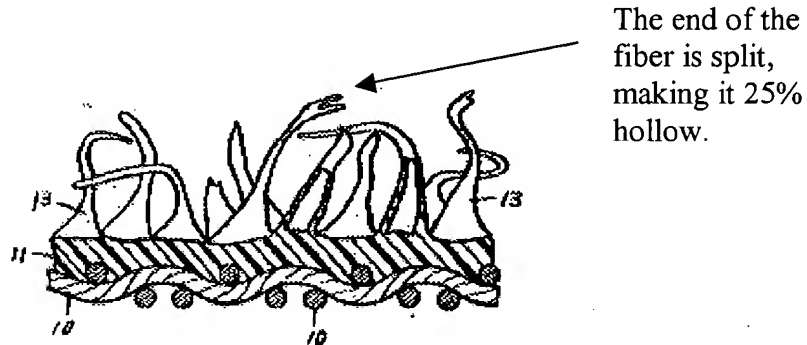
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1 – 6, 10, 11, 20 – 22, 27, 30, 35, 38, 39, 42, 44 and 45 are rejected under 35 U.S.C. 102(b) as being anticipated by Watanabe (USPN 3,600,260).

Watanabe discloses a sheet with a surface microstructure (Figure 4). The microstructure is formed by a layer of thermoplastic material laminated to a woven backing (Column 1, lines 28 – 29 and Column 2, lines 62 – 65), forming a multi-layer profile having a soft textile feel (Column 2, lines 32 – 35). Fringes are formed in the surface of the thermoplastic material having lengths between 0.75 to 6 mm (Column 4, lines 39 – 41). The fringes are either hollow or solid with branched ends, giving 25 percent of volume of the peaks at the top being empty (Figure 4, as copied on the next page, and Column 4, lines 41 – 42). The density of fringes varies from 120 to 2000 per squared centimeter (Column 1, lines 35 – 36). The hollow

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diameter ratio of fringe is 1 or lower since the largest diameter at the base that is allowable is between 0.3 and 1 mm and decreases to the tip of the fringe (Column 3, line 35), and the fringes also have a aspect ratio of at least one (Column 4, lines 40 – 41 and Column 3, line 35). As seen by Figure 1, the entire surface of the thermoplastic is treated to have a fringed surface. The microstructure surface is used as suede matte finished material to form a variety of articles, including handbags, which would have enhanced carrying or storing properties (Column 34 – 35).



Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1 – 6, 10, 11, 20 – 22, 27, 30, 35, 38, 39, 42, 44 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe (USPN 3,600,260).

Watanabe discloses a sheet with a surface microstructure (Figure 4). The

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microstructure is formed by a layer of thermoplastic material laminated to a woven backing (Column 1, lines 28 – 29 and Column 2, lines 62 – 65), forming a multi-layer profile having a soft textile feel (Column 2, lines 32 – 35). Fringes are formed in the surface of the thermoplastic material having lengths between 0.75 to 6 mm (Column 4, lines 39 – 41). The fringes are either hollow or solid with branched ends, giving 25 percent of volume of the peaks at the top being empty (Figure 4 and Column 4, lines 41 – 42). The density of fringes varies from 120 to 2000 per squared centimeter (Column 1, lines 35 – 36). The hollow diameter ratio of fringe is 1 or lower since the largest diameter at the base that is allowable is between 0.3 and 1 mm and decreases to the tip of the fringe (Column 3, line 35), and the fringes also have a aspect ratio of at least one (Column 4, lines 40 – 41 and Column 3, line 35). As seen by Figure 1, the entire surface of the thermoplastic is treated to have a fringed surface. The microstructure surface is used as suede matte finished material to form a variety of articles, including handbags, which would have enhanced carrying or storing properties (Column 34 – 35). It would be obvious to one of ordinary skill in the art to form a glove from suede material since it is well known to have suede gloves.

Regarding to the claimed aspect of the hollowed shape,

It is well settled that a particular shape of a prior invention carries no patentable weight unless the applicant can demonstrate that the new shape provides significant unforeseen improvements to the invention. See *In re Seid*, 161 F.2d 229, 73 USPQ 431 (CCPA 1947) Also, see *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966). In the instant case, the application does not indicate any new, significant attributes of the invention due to its shape, which would have been unforeseen to one of ordinary skill in the art. Therefore it would have been obvious to

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one of ordinary skill in the art at the time of the invention to change the shape of the fringes to have hollow portions at the top 25 percent of the fringe. One skilled in the art would have been motivated to change the shape of the filament in order to change the feel and abilities of the fringes on the surface of the microstructure.

10. Claims 7, 9 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe in view of Hemming (USPN 3,987,228).

Watanabe discloses the claimed sheet with a surface microstructure above except for the thermoplastic material being cured, irradiated or cross-linked, the profile or molding being mono-layer, the surface microstructure being subjected to a post treatment step selected from the group consisting of treatment with an abrading device, corona treatment, curing, irradiation and cross-linking and an article that has a matte surface appearance.

Hemming teaches a thermoplastic material that is cross linked through the use of irradiation either before or after the formation of the fringe (Column 3, lines 3 – 6 and lines 32 – 35) in a mono-layer profile (Column 1, lines 17 – 21) for the purpose of forming a pile, fringe, surface on a thermoplastic material that has increased physical properties such as tear strength and elongation to break.

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided the cross-linked thermoplastic material in the profile

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structure in Watanabe in order to have thermoplastic material that has increased physical properties such as tear strength and elongation to break as taught by Hemming.

11. Claims 8, 13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe in view of Strobel et al. (WO 99/16608).

Watanabe discloses the claimed sheet with a surface microstructure above except for having the surface microstructure on both sides, wherein least one of the outer layers is a fringed layer and at least one of the inner layers is an oriented film, preferable a biaxially oriented polypropylene film and where the film is oriented.

Strobel et al. teach a surface microstructure formed on two sides (Page 27, line 29 to Page 28, line 7) of a biaxially oriented polypropylene film (Page 28, lines 19 –24) for the purpose of forming a decorative film having a high tensile strength while changing the gloss characteristics of the film.

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided the surface microstructure on both sides of film while using biaxially oriented polypropylene film in Watanabe in order to form a decorative film having a high tensile strength while changing the gloss characteristics of the film as taught by Strobel et al.

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12. Claims 12 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe in view of Jones (USPN 3,814,791).

Watanabe discloses the claimed sheet with a surface microstructure above except for the surface-structured layer is an interlayer and the article is a floor or wall covering.

Jones teaches an interlayer made of a surface-structured layer (Figure 4), where the surface-microstructure is used as part of a floor or wall covering (Column 12, lines 64 – 75) for the purpose of having a pile surface that are stabilized and capable of being adhered to a 2nd surface.

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided the interlayer surface structured layer in Watanabe in order to have pile surface that are stabilized and capable of being adhered to a 2nd surface as taught by Jones.

13. Claims 14, 15 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe (USPN 3,600,260) in view of Watanabe (USPN 3,809,734).

Watanabe discloses the claimed sheet with a surface microstructure above except for one of the layers being a foamed layer, wherein at least one layer is elastic and the molding or profile being used in automotive applications.

Watanabe ('734) teaches an elastic foam layer (Column 4, lines 4 – 6 and Column 2, lines 32 – 37) in an automobile floor mat (Column 2, line 40) for the purpose of forming a foamed sheet with a pile, fringe, surface that is soft to touch and the orientation of the pile surface is controlled by the user.

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided the elastic foam layer in Watanabe ('260) in order to form a foamed sheet with a pile, fringe, surface that is soft to touch and the orientation of the pile surface is controlled by the user as taught by Watanabe ('734).

14. Claims 17, 24, 25 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe in view of Quacquarella et al. (USPN 5,989,235).

Watanabe discloses the claimed sheet with a surface microstructure above except for one layer being vapor permeable and liquid impermeable, the article being a hygienic product, the article being a medicinal collection bag and the article being an ostomy bag.

Quacquarella et al. teaches a flocked thermoplastic material which is liquid impermeable (Column 2, lines 7 – 16) used as part of a multi-layer film (Column 3, lines 12 – 13) in an ostomy bag (Column 1, lines 5 – 9) for the purpose of making the bag more comfortable for the user to wear by reducing contact with the moisture impermeable material.

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided the flocked material on the surface of an ostomy bag in Watanabe in order to make a bag that is more comfortable for the user to wear by reducing contact with the moisture impermeable material as taught by Quacquarella et al.

15. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe in view of Fakuda et al. (USPN 5,407,735).

Watanabe discloses the claimed sheet with a surface microstructure above except for the molding or profile being printed or imprinted.

Fakuda et al. teach a napped, fringed, fabric that has a hydrolyzing agent solution applied to the ends of fibers, fringe, by a printing process (Column 8, lines 2 – 6) for the purpose of applying the solution to a select portion of the material instead of the entire article.

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided the printing process in Watanabe in order to apply a solution to a select portion of the material instead of the entire article as taught by Fakuda et al.

16. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe in view of Hamlin (USPN 5,815,840).

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Watanabe discloses the sheet with a surface microstructure above except the article being water repellant.

Hamlin teaches a liquid resistant layer (Column 4, lines 12 – 15) in a glove that contains pile, fringe, surface areas (Column 4, lines 63 – 64) for the purpose of preventing liquids from contacting the surface of the user's hands.

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided the liquid resistant layer in Watanabe in order to prevent liquids from contacting the surface of the user's hands as taught by Hamlin.

17. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe in view of Reuben (USPN 4,174,991).

Watanabe discloses the sheet with a surface microstructure above except the article having anti-skid properties.

Reuben teaches an antiskid surface (Column 2, lines 55 – 57) that is formed on the lower surface of an automobile floor mat that has a carpet pile surface on the upper surface (Column 3, line 50) for the purpose of minimizing the movement of the mat on another surface on which it rests.

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided the antiskid surface as a lower surface on Watanabe in order to minimize the movement of the mat on another surface on which it rests as taught by Reuben.

18. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe in view of Nagura et al. (USPN 4,927,682).

Watanabe discloses the sheet with a surface microstructure above except the article being heat resistant.

Nagura et al. teach a heat resistant base layer (Column 1, lines 45 – 49) in a flocked, fringed, sheet for the purpose of having a sheet that is resistant to both heat and fire that may be used for decorative purposes in vehicles and buildings.

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided the heat resistant base layer in Watanabe in order to form a sheet that is resistant to both heat and fire that may be used for decorative purposes in vehicles and buildings as taught by Nagura et al.

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Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia L. Nordmeyer whose telephone number is (703) 306-5480. The examiner can normally be reached on Mon.-Thurs. from 7:00-4:30 & alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Y. Pyon can be reached on (703) 308-4251. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Patricia L. Nordmeyer
Examiner
Art Unit 1772

pln
pln


HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772

11/25/03